D4012-1
B108830

Work Order ID 108830

October-29-13 10:09:01 AM

108830

Item ID: D4012-1 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Cushion

Start Date: 10/29/13 **Start Qty:** 20.00 *20*
Required Date: 10/29/13 **Req'd Qty:** 20.00 *20*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** MLS **Date:** 13-10-30 **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4012	**Revision Nbr** B								
100		0.00	MH	10/11/23					
100									
Mill Conv	**Memo**	0.00							
Conventional Milling Machine	***DT9889***								
110	QC2- Inspect parts off machine FAI/FAIB	0.00	MH	13/11/23					
110									
QC	**Memo**	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00				20			11-13-25
120									
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

_____
_____
_____

Work Order ID 108830

October-29-13 10:09:01 AM

108830

Item ID: D4012-1 **Accept** *N900040100* **Setup Start** *NS1*

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Required Date: 10/29/13 **Req'd Qty:** 20.00 *20* **Customer:**

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
123		0.00				20			FF 13-11-26
123									
Small Fab	**Memo**	0.00							
Small Fab	CLAMP AND FORM CUSHION AS PER DWG BY SLIGHTLY HEATING IT WITH HEAT GUN, LET IT COOL DOWN BEFORE REMOVING CLAMP.								
126	QC5- Inspect part completeness to step on W/O	0.00				20			
126									
QC	**Memo**	0.00							
Quality Control									
130	Identify as per dwg & Stock Location (18x) ST450	0.00							
130									
Packaging	**Memo** 2x PPP106100	0.00				20x		13-11-26	
Packaging									

DAS 27 9-89 13/11/26

DAS 28 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
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Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

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☐ Over/Under tolerance
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☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

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☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
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Work Order ID 108830

October-29-13 10:09:01 AM

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Cust Item ID:
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Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** **Date:**
QC: _____ **Date:** _____ **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC21- Final Inspection - Work Order Release	0.00					13/11/27		
140									
QC	**Memo**	0.00							
Quality Control									

ME
13-11-26

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

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- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
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- ☐ Drawing
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- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

Picklist Print

October-29-13 10:09:01 AM

Work Order ID: 108830

Parent Item: D4012-1

Parent Item Name: Cushion

Start Date: 10/29/13 **Required Date:** 10/29/13

Start Qty: 20.00 **Required Qty:** 20.00

Comments: IPP RevA: New issue 09.10.28 DD verified by:JLM IPP RevB: revA as per dwg 09.11.18 DD verified by:JLM IPP Rev:C 11.01.10 as per dwg Rev.B DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4287-3 Uhmw U-Channel		Manufactured	No			100	f	33.0000	**0.37**	**7.789474**			

Location	Loc Qty	Loc Code			
ST209a	33				
107507	8				
107721	25		7.79	MH	13/11/24

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

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Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

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Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
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Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

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☐ Set-up
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☐ Weld
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_____
_____
_____

DART AEROSPACE LTD	Work Order:	108830
Description: Cushion	Part Number:	D4012-1
Inspection Dwg: D4012 **Rev:** B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

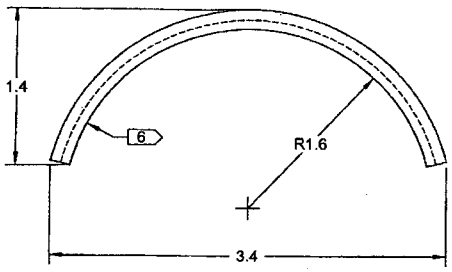
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.25	+/-0.030	1.25	✓		MH-04	Caliper
1.050	+/-0.010	1.049	✓			
0.10	+/-0.030	.1020	✓			
4.41	+/-0.030	4.395	✓			
~~0.094~~	~~+/-0.010~~					
0.17	+/-0.030	.193	✓			
.076	+.015 -.000	.076	✓			

Measured by:	MH /
Date:	13/11/23

Audited by:	JL
Date:	13-11-25

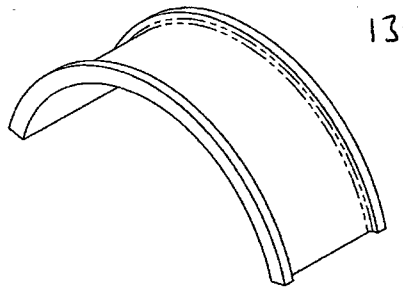
Preliminary Approval:	
Date:	

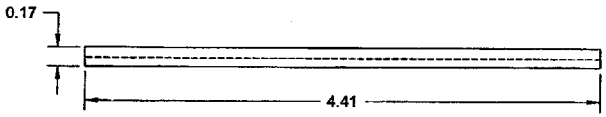
Rev	Date	Change	Revised by	Approved
A	11.01.17	New Issue	KJ	
B	12.08.02	Dwg Rev updated	KJ	

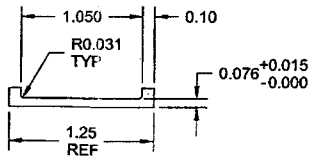


D4012-1 CUSHION
(B) (MAKE FROM D4012-1F)

108830 MCJ
13-10-30







(B) D4012-1F FLAT MACHINED STATE (1)

RELEASED
2010-12-23

REV.	DESCRIPTION	BY	DATE
B	CHANGED RAW MATERIAL TO REDUCE MANUFACTURING COSTS, PART NOW MACHINED FLAT AND SHAPED WITH RADIUS. REF: PAR10-29	MB	10.12.07
A	NEW ISSUE	MB	09.10.19

NOTES:
1) MATERIAL: MAKE FROM D4287-3 (B)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4012-1" AND B/N "BXXXXX" PER QSI 044 6.1
7) WEIGHT: 0.02 lbs

DESIGN	DART AEROSPACE LTD	
DRAWN	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DRAWING NO. D4012	REV. B
MFG. APPR.		SHEET 1 OF 1
APPROVED	TITLE CUSHION	SCALE NTS
DE APPR.		
DATE 10.12.07		

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